

## Patent Application US/08/062,021

## SEQUENCE LISTING

See pp. 1 + 6

1  
2  
3 (1) GENERAL INFORMATION  
4 (i) APPLICANT: Lynn Bergmeyer  
5 Thomas J. Cummins  
6 John B. Findlay  
7 JoAnne H. Kerschner  
8 (ii) TITLE OF THE INVENTION: DIAGNOSTIC  
9 COMPOSITIONS, ELEMENTS, METHODS AND TEST KITS  
10 FOR AMPLIFICATION AND DETECTION OF HUMAN CMV  
11 DNA USING PRIMERS HAVING MATCHED MELTING  
12 TEMPERATURES  
13 (iii) NUMBER OF SEQUENCES: 26  
14 (iv) CORRESPONDENCE ADDRESS:  
15 (A) ADDRESSEE: Eastman Kodak Company,  
16 Patent Legal Staff  
17 (B) STREET: 343 State Street  
18 (C) CITY: Rochester  
19 (D) STATE: New York  
20 (E) COUNTRY: U.S.A.  
21 (F) ZIP: 14650-2201  
22 (v) COMPUTER READABLE FORM:  
23 (A) MEDIUM TYPE: Diskette, 3.5  
24 inch, 1.44 MB storage (IBM)  
25 (B) COMPUTER: IBM PS/2  
26 (C) OPERATING SYSTEM: MS-DOS Version  
27 3.3  
28 (D) SOFTWARE: PC-8 (Word for Windows)  
29 (vi) CURRENT APPLICATION DATA:  
30 (A) APPLICATION NUMBER: To Be Assigned  
31 (B) FILING DATE: To Be Assigned  
32 (C) CLASSIFICATION: To Be Assigned  
33 (vii) PRIOR APPLICATION DATE: None  
34 (viii) ATTORNEY/AGENT INFORMATION:  
35 (A) NAME: Tucker, J. Lanny  
36 (B) REGISTRATION NUMBER: 27,678  
37 (C) REFERENCE/DOCKET NUMBER: 67270  
38 (ix) TELECOMMUNICATION INFORMATION:  
39 (A) TELEPHONE: (716) 722-9332  
40 (B) TELEFAX: (716) 477-4646  
41  
42 (2) INFORMATION FOR SEQ IDNO:1  
43 (i) SEQUENCE CHARACTERISTICS:  
44 (A) LENGTH: 25 nucleotides  
45 (B) TYPE: Nucleic acid  
46 (C) STRANDEDNESS: Single  
47 (D) TOPOLOGY: Linear  
48 (ii) MOLECULE TYPE: Primer for hCMV DNA  
49 (iii) HYPOTHETICAL: No  
50 (iv) ANTI-SENSE: No  
51 (vi) ORIGINAL SOURCE: Synthetically prepared  
52 (vii) IMMEDIATE SOURCE: Same

This colon is not correct.  
Please delete this throughout  
the sequence listing. The computer  
sees it as an error.  
(I suggest a "search and  
replace" function for  
this: Search for all  
"ID:" & replace with  
"ID" space )

## Patent Application US/08/062,021

53 (x) PUBLICATION INFORMATION: U.S. 5,147,777  
54 (xi) SEQUENCE DESCRIPTION: SEQ ID: NO:1  
55  
56 GAGGCTATTG TAGCCTACAC TTGG 25  
57  
58 (3) INFORMATION FOR SEQ ID: NO:2  
59 (i) SEQUENCE CHARACTERISTICS:  
60 (A) LENGTH: 25 nucleotides  
61 (B) TYPE: Nucleic acid  
62 (C) STRANDEDNESS: Single  
63 (D) TOPOLOGY: Linear  
64 (ii) MOLECULE TYPE: Primer for hCMV DNA  
65 (iii) HYPOTHETICAL: No  
66 (iv) ANTI-SENSE: No  
67 (vi) ORIGINAL SOURCE: Synthetically prepared  
68 (vii) IMMEDIATE SOURCE: Same  
69 (x) PUBLICATION INFORMATION: U.S. 5,147,777  
70 (xi) SEQUENCE DESCRIPTION: SEQ ID: NO:2  
71  
72 CAGCACCATC CTCCTCTTCC TCTGG 25  
73  
74  
75  
76 (4) INFORMATION FOR SEQ ID: NO:3  
77 (i) SEQUENCE CHARACTERISTICS:  
78 (A) LENGTH: 25 nucleotides  
79 (B) TYPE: Nucleic acid  
80 (C) STRANDEDNESS: Single  
81 (D) TOPOLOGY: Linear  
82 (ii) MOLECULE TYPE: Primer for hCMV DNA  
83 (iii) HYPOTHETICAL: No  
84 (iv) ANTI-SENSE: No  
85 (vi) ORIGINAL SOURCE: Synthetically prepared  
86 (vii) IMMEDIATE SOURCE: Same  
87 (x) PUBLICATION INFORMATION: None  
88 (xi) SEQUENCE DESCRIPTION: SEQ ID: NO:3  
89  
90 TGCAGTCCCA GGTGCTTCGG CTCAT 25  
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92 (5) INFORMATION FOR SEQ ID: NO:4  
93 (i) SEQUENCE CHARACTERISTICS:  
94 (A) LENGTH: 25 nucleotides  
95 (B) TYPE: Nucleic acid  
96 (C) STRANDEDNESS: Single  
97 (D) TOPOLOGY: Linear  
98 (ii) MOLECULE TYPE: Primer for hCMV DNA  
99 (iii) HYPOTHETICAL: No  
100 (iv) ANTI-SENSE: No  
101 (vi) ORIGINAL SOURCE: Synthetically prepared  
102 (vii) IMMEDIATE SOURCE: Same  
103 (x) PUBLICATION INFORMATION: U.S. 5,147,777  
104 (xi) SEQUENCE DESCRIPTION: SEQ ID: NO:4

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106 CACCACGCAG CGGCCCTTGA TGTTT 25  
107  
108  
109  
110 (6) INFORMATION FOR SEQ ID:NO:5  
111 (i) SEQUENCE CHARACTERISTICS:  
112 (A) LENGTH: 30 nucleotides  
113 (B) TYPE: Nucleic acid  
114 (C) STRANDEDNESS: Single  
115 (D) TOPOLOGY: Linear  
116 (ii) MOLECULE TYPE: Probe for hCMV DNA  
117 (iii) HYPOTHETICAL: No  
118 (iv) ANTI-SENSE: No  
119 (vi) ORIGINAL SOURCE: Synthetically prepared  
120 (vii) IMMEDIATE SOURCE: Same  
121 (x) PUBLICATION INFORMATION: U.S. 5,147,777  
122 (xi) SEQUENCE DESCRIPTION: SEQ ID:NO:5  
123  
124 GGTGTCACCC CCAGAGTCCC CTGTACCCGC 30  
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126 (7) INFORMATION FOR SEQ ID:NO:6  
127 (i) SEQUENCE CHARACTERISTICS:  
128 (A) LENGTH: 30 nucleotides  
129 (B) TYPE: Nucleic acid  
130 (C) STRANDEDNESS: Single  
131 (D) TOPOLOGY: Linear  
132 (ii) MOLECULE TYPE: Probe for hCMV DNA  
133 (iii) HYPOTHETICAL: No  
134 (iv) ANTI-SENSE: No  
135 (vi) ORIGINAL SOURCE: Synthetically prepared  
136 (vii) IMMEDIATE SOURCE: Same  
137 (x) PUBLICATION INFORMATION: U.S. 5,147,777  
138 (xi) SEQUENCE DESCRIPTION: SEQ ID:NO:6  
139  
140 GACACAGTGT CCTCCGCTC CTCCTGAGCA 30  
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144 (8) INFORMATION FOR SEQ ID:NO:7  
145 (i) SEQUENCE CHARACTERISTICS:  
146 (A) LENGTH: 30 nucleotides  
147 (B) TYPE: Nucleic acid  
148 (C) STRANDEDNESS: Single  
149 (D) TOPOLOGY: Linear  
150 (ii) MOLECULE TYPE: Probe for hCMV DNA  
151 (iii) HYPOTHETICAL: No  
152 (iv) ANTI-SENSE: No  
153 (vi) ORIGINAL SOURCE: Synthetically prepared  
154 (vii) IMMEDIATE SOURCE: Same  
155 (x) PUBLICATION INFORMATION: U.S. 5,147,777  
156 (xi) SEQUENCE DESCRIPTION: SEQ ID:NO:7

## Patent Application US/08/062,021

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158 GTGGAAGGCG GCTCGCTGGA AGCCGGTCGT 30  
159  
160 (9) INFORMATION FOR SEQ ID:NO:8  
161 (i) SEQUENCE CHARACTERISTICS:  
162 (A) LENGTH: 30 nucleotides  
163 (B) TYPE: Nucleic acid  
164 (C) STRANDEDNESS: Single  
165 (D) TOPOLOGY: Linear  
166 (ii) MOLECULE TYPE: Probe for hCMV DNA  
167 (iii) HYPOTHETICAL: No  
168 (iv) ANTI-SENSE: No  
169 (vi) ORIGINAL SOURCE: Synthetically prepared  
170 (vii) IMMEDIATE SOURCE: Same  
171 (x) PUBLICATION INFORMATION: U.S. 5,147,777  
172 (xi) SEQUENCE DESCRIPTION: SEQ ID:NO:8  
173  
174 GAACCGAGGG CCGGCTCACC TCTATGTTGG 30  
175  
176  
177  
178 (10) INFORMATION FOR SEQ ID:NO:9  
179 (i) SEQUENCE CHARACTERISTICS:  
180 (A) LENGTH: 41 nucleotides  
181 (B) TYPE: Nucleic acid  
182 (C) STRANDEDNESS: Single  
183 (D) TOPOLOGY: Linear  
184 (ii) MOLECULE TYPE: Probe for HIV-I DNA  
185 (iii) HYPOTHETICAL: No  
186 (iv) ANTI-SENSE: No  
187 (vi) ORIGINAL SOURCE: Synthetically prepared  
188 (vii) IMMEDIATE SOURCE: Same  
189 (x) PUBLICATION INFORMATION: Unknown  
190 (xi) SEQUENCE DESCRIPTION: SEQ ID:NO:9  
191  
192 ATCCTGGGAT TAAATAAAAT AGTAAGAATG TATAGCCCTA C 41  
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194 (11) INFORMATION FOR SEQ ID:NO:10  
195 (i) SEQUENCE CHARACTERISTICS:  
196 (A) LENGTH: 28 nucleotides  
197 (B) TYPE: Nucleic acid  
198 (C) STRANDEDNESS: Single  
199 (D) TOPOLOGY: Linear  
200 (ii) MOLECULE TYPE: Primer for HIV-I DNA  
201 (iii) HYPOTHETICAL: No  
202 (iv) ANTI-SENSE: No  
203 (vi) ORIGINAL SOURCE: Synthetically prepared  
204 (vii) IMMEDIATE SOURCE: Same  
205 (x) PUBLICATION INFORMATION: Unknown  
206 (xi) SEQUENCE DESCRIPTION: SEQ ID:NO:10  
207  
208 AGTGGGGGGA CATCAAGCAG CCATGCAA 28

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209  
210  
211  
212 (12) INFORMATION FOR SEQ ID:NO:11  
213 (i) SEQUENCE CHARACTERISTICS:  
214 (A) LENGTH: 26 nucleotides  
215 (B) TYPE: Nucleic acid  
216 (C) STRANDEDNESS: Single  
217 (D) TOPOLOGY: Linear  
218 (ii) MOLECULE TYPE: Primer for HIV-I DNA  
219 (iii) HYPOTHETICAL: No  
220 (iv) ANTI-SENSE: No  
221 (vi) ORIGINAL SOURCE: Synthetically prepared  
222 (vii) IMMEDIATE SOURCE: Same  
223 (x) PUBLICATION INFORMATION: None  
224 (xi) SEQUENCE DESCRIPTION: SEQ ID:NO:11  
225  
226 CTTGGTTCTC TCATCTGGCC TGGTGC 26  
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228 (13) INFORMATION FOR SEQ ID:NO:12  
229 (i) SEQUENCE CHARACTERISTICS:  
230 (A) LENGTH: 28 nucleotides  
231 (B) TYPE: Nucleic acid  
232 (C) STRANDEDNESS: Single  
233 (D) TOPOLOGY: Linear  
234 (ii) MOLECULE TYPE: Primer for HIV-I DNA  
235 (iii) HYPOTHETICAL: No  
236 (iv) ANTI-SENSE: No  
237 (vi) ORIGINAL SOURCE: Synthetically prepared  
238 (vii) IMMEDIATE SOURCE: Same  
239 (x) PUBLICATION INFORMATION: None  
240 (xi) SEQUENCE DESCRIPTION: SEQ ID:NO:12  
241  
242 TAGCACCCAC CAGGCAAAG AGAAGAGT 28  
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244  
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246 (14) INFORMATION FOR SEQ ID:NO:13  
247 (i) SEQUENCE CHARACTERISTICS:  
248 (A) LENGTH: 28 nucleotides  
249 (B) TYPE: Nucleic acid  
250 (C) STRANDEDNESS: Single  
251 (D) TOPOLOGY: Linear  
252 (ii) MOLECULE TYPE: Primer for HIV-I DNA  
253 (iii) HYPOTHETICAL: No  
254 (iv) ANTI-SENSE: No  
255 (vi) ORIGINAL SOURCE: Synthetically prepared  
256 (vii) IMMEDIATE SOURCE: Same  
257 (x) PUBLICATION INFORMATION: None  
258 (xi) SEQUENCE DESCRIPTION: SEQ ID:NO:13  
259  
260 AGATGCTGTT GCGCCTCAAT AGCCCTCA 28

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261  
262 (15) INFORMATION FOR SEQ ID:NO:14  
263 (i) SEQUENCE CHARACTERISTICS:  
264 (A) LENGTH: 28 nucleotides  
265 (B) TYPE: Nucleic acid  
266 (C) STRANDEDNESS: Single  
267 (D) TOPOLOGY: Linear  
268 (ii) MOLECULE TYPE: Probe for HIV-I DNA  
269 (iii) HYPOTHETICAL: No  
270 (iv) ANTI-SENSE: No  
271 (vi) ORIGINAL SOURCE: Synthetically prepared  
272 (vii) IMMEDIATE SOURCE: Same  
273 (x) PUBLICATION INFORMATION: None  
274 (xi) SEQUENCE DESCRIPTION: SEQ ID:NO:14  
275  
276 GAGACCATCA ATGAGGAAGC TGCAGAAT 28  
277  
278  
279  
280 (16) INFORMATION FOR SEQ ID:NO:15  
281 (i) SEQUENCE CHARACTERISTICS:  
282 (A) LENGTH: 28 nucleotides  
283 (B) TYPE: Nucleic acid  
284 (C) STRANDEDNESS: Single  
285 (D) TOPOLOGY: Linear  
286 (ii) MOLECULE TYPE: Probe for HIV-I DNA  
287 (iii) HYPOTHETICAL: No  
288 (iv) ANTI-SENSE: No  
289 (vi) ORIGINAL SOURCE: Synthetically prepared  
290 (vii) IMMEDIATE SOURCE: Same  
291 (x) PUBLICATION INFORMATION: None  
292 (xi) SEQUENCE DESCRIPTION: SEQ ID:NO:15  
293  
294 GTGCAGCAGC AGAACAAATT GCTGAGGG 28  
295  
296 (17) INFORMATION FOR SEQ ID:NO:16  
297 (i) SEQUENCE CHARACTERISTICS:  
298 (A) LENGTH: 27 nucleotides  
299 (B) TYPE: Nucleic acid  
300 (C) STRANDEDNESS: Single  
301 (D) TOPOLOGY: Linear  
302 (ii) MOLECULE TYPE: Primer for hCMV DNA  
303 (iii) HYPOTHETICAL: No  
304 (iv) ANTI-SENSE: No  
305 (vi) ORIGINAL SOURCE: Synthetically prepared  
306 (vii) IMMEDIATE SOURCE: Same  
307 (x) PUBLICATION INFORMATION: None  
308 (xi) SEQUENCE DESCRIPTION: SEQ ID:NO:16  
309  
310 5'-CATTTCCACT GACTTTCTGA CGCAGT-3' 27  
311  
312

delete  
(sequences 1-15  
are correct,  
sequences 16-26  
are not because  
of this).

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313  
314 (18) INFORMATION FOR SEQ ID:NO:17  
315 (i) SEQUENCE CHARACTERISTICS:  
316 (A) LENGTH: 24 nucleotides  
317 (B) TYPE: Nucleic acid  
318 (C) STRANDEDNESS: Single  
319 (D) TOPOLOGY: Linear  
320 (ii) MOLECULE TYPE: Primer for hCMV DNA  
321 (iii) HYPOTHETICAL: No  
322 (iv) ANTI-SENSE: No  
323 (vi) ORIGINAL SOURCE: Synthetically prepared  
324 (vii) IMMEDIATE SOURCE: Same  
325 (x) PUBLICATION INFORMATION: None  
326 (xi) SEQUENCE DESCRIPTION: SEQ ID:NO:17  
327  
328 5'-TGAGGTCGTG GAACTTGATG GCGT-3' 24  
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330 (19) INFORMATION FOR SEQ ID:NO:18  
331 (i) SEQUENCE CHARACTERISTICS:  
332 (A) LENGTH: 30 nucleotides  
333 (B) TYPE: Nucleic acid  
334 (C) STRANDEDNESS: Single  
335 (D) TOPOLOGY: Linear  
336 (ii) MOLECULE TYPE: Probe for hCMV DNA  
337 (iii) HYPOTHETICAL: No  
338 (iv) ANTI-SENSE: No  
339 (vi) ORIGINAL SOURCE: Synthetically prepared  
340 (vii) IMMEDIATE SOURCE: Same  
341 (x) PUBLICATION INFORMATION: None  
342 (xi) SEQUENCE DESCRIPTION: SEQ ID:NO:18  
343  
344 5'-GGTCATCGCC GTAGTAGATG CGTAAGGCCT-3' 30  
345  
346  
347  
348 (20) INFORMATION FOR SEQ ID:NO:19  
349 (i) SEQUENCE CHARACTERISTICS:  
350 (A) LENGTH: 26 nucleotides  
351 (B) TYPE: Nucleic acid  
352 (C) STRANDEDNESS: Single  
353 (D) TOPOLOGY: Linear  
354 (ii) MOLECULE TYPE: Primer for avian  
355 endogenous  
356 provirus ev-1 DNA  
357 (iii) HYPOTHETICAL: No  
358 (iv) ANTI-SENSE: No  
359 (vi) ORIGINAL SOURCE: Synthetically prepared  
360 (vii) IMMEDIATE SOURCE: Same  
361 (x) PUBLICATION INFORMATION: None  
362 (xi) SEQUENCE DESCRIPTION: SEQ ID:NO:19  
363  
364 5'-GGAATGACGC AAGGACATAT GGGCGT-3' 26

## Patent Application US/08/062,021

365  
366 (21) INFORMATION FOR SEQ ID:NO:20  
367 (i) SEQUENCE CHARACTERISTICS:  
368 (A) LENGTH: 26 nucleotides  
369 (B) TYPE: Nucleic acid  
370 (C) STRANDEDNESS: Single  
371 (D) TOPOLOGY: Linear  
372 (ii) MOLECULE TYPE: Primer for avian  
373 endogenous  
374 provirus ev-1 DNA  
375 (iii) HYPOTHETICAL: No  
376 (iv) ANTI-SENSE: No  
377 (vi) ORIGINAL SOURCE: Synthetically prepared  
378 (vii) IMMEDIATE SOURCE: Same  
379 (x) PUBLICATION INFORMATION: None  
380 (xi) SEQUENCE DESCRIPTION: SEQ ID:NO:20  
381  
382 5'-CCCAGGTGCA CACCAATGTG GTGGAT-3' 26  
383  
384  
385  
386 (22) INFORMATION FOR SEQ ID:NO:21  
387 (i) SEQUENCE CHARACTERISTICS:  
388 (A) LENGTH: 25 nucleotides  
389 (B) TYPE: Nucleic acid  
390 (C) STRANDEDNESS: Single  
391 (D) TOPOLOGY: Linear  
392 (ii) MOLECULE TYPE: Primer for positive  
393 control target DNA  
394 (iii) HYPOTHETICAL: No  
395 (iv) ANTI-SENSE: No  
396 (vi) ORIGINAL SOURCE: Synthetically prepared  
397 (vii) IMMEDIATE SOURCE: Same  
398 (x) PUBLICATION INFORMATION: None  
399 (xi) SEQUENCE DESCRIPTION: SEQ ID:NO:21  
400  
401 5'-GGACTGTGCG CGTTGTATAC CCTGC-3' 25  
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403 (23) INFORMATION FOR SEQ ID:NO:22  
404 (i) SEQUENCE CHARACTERISTICS:  
405 (A) LENGTH: 25 nucleotides  
406 (B) TYPE: Nucleic acid  
407 (C) STRANDEDNESS: Single  
408 (D) TOPOLOGY: Linear  
409 (ii) MOLECULE TYPE: Primer for positive  
410 control target DNA  
411 (iii) HYPOTHETICAL: No  
412 (iv) ANTI-SENSE: No  
413 (vi) ORIGINAL SOURCE: Synthetically prepared  
414 (vii) IMMEDIATE SOURCE: Same  
415 (x) PUBLICATION INFORMATION: None  
416 (xi) SEQUENCE DESCRIPTION: SEQ ID:NO:22



## Patent Application US/08/062,021

417  
418 5'-ACTCCCGAAG CGAATGGCAC GTGGA-3' 25  
419  
420  
421  
422 (24) INFORMATION FOR SEQ ID:NO:23  
423 (i) SEQUENCE CHARACTERISTICS:  
424 (A) LENGTH: 25 nucleotides  
425 (B) TYPE: Nucleic acid  
426 (C) STRANDEDNESS: Single  
427 (D) TOPOLOGY: Linear  
428 (ii) MOLECULE TYPE: Primer for positive  
429 control target DNA  
430 (iii) HYPOTHETICAL: No  
431 (iv) ANTI-SENSE: No  
432 (vi) ORIGINAL SOURCE: Synthetically prepared  
433 (vii) IMMEDIATE SOURCE: Same  
434 (x) PUBLICATION INFORMATION: None  
435 (xi) SEQUENCE DESCRIPTION: SEQ ID:NO:23  
436  
437 5'-CATAGCTTGT GCCCGTGTGG CACGT-3' 25  
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439 (25) INFORMATION FOR SEQ ID:NO:24  
440 (i) SEQUENCE CHARACTERISTICS:  
441 (A) LENGTH: 25 nucleotides  
442 (B) TYPE: Nucleic acid  
443 (C) STRANDEDNESS: Single  
444 (D) TOPOLOGY: Linear  
445 (ii) MOLECULE TYPE: Primer for positive  
446 control target DNA  
447 (iii) HYPOTHETICAL: No  
448 (iv) ANTI-SENSE: No  
449 (vi) ORIGINAL SOURCE: Synthetically prepared  
450 (vii) IMMEDIATE SOURCE: Same  
451 (x) PUBLICATION INFORMATION: None  
452 (xi) SEQUENCE DESCRIPTION: SEQ ID:NO:24  
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454 5'-CCAAGACGAG ACCGTCAGAG CTGGT-3' 25  
455  
456  
457  
458 (26) INFORMATION FOR SEQ ID:NO:25  
459 (i) SEQUENCE CHARACTERISTICS:  
460 (A) LENGTH: 26 nucleotides  
461 (B) TYPE: Nucleic acid  
462 (C) STRANDEDNESS: Single  
463 (D) TOPOLOGY: Linear  
464 (ii) MOLECULE TYPE: Probe for avian  
465 endogenous  
466 provirus ev-1 DNA  
467 (iii) HYPOTHETICAL: No  
468 (iv) ANTI-SENSE: No

## Patent Application US/08/062,021

469 (vi) ORIGINAL SOURCE: Synthetically prepared  
470 (vii) IMMEDIATE SOURCE: Same  
471 (x) PUBLICATION INFORMATION: None  
472 (xi) SEQUENCE DESCRIPTION: SEQ ID:NO:25  
473  
474 5'-AAGCTGTTGC CGCCATCAAA TAAACG-3' 26  
475  
476 (27) INFORMATION FOR SEQ ID:NO:26  
477 (i) SEQUENCE CHARACTERISTICS:  
478 (A) LENGTH: 30 nucleotides  
479 (B) TYPE: Nucleic acid  
480 (C) STRANDEDNESS: Single  
481 (D) TOPOLOGY: Linear  
482 (ii) MOLECULE TYPE: Probe for positive  
483 control target DNA  
484 (iii) HYPOTHETICAL: No  
485 (iv) ANTI-SENSE: No  
486 (vi) ORIGINAL SOURCE: Synthetically prepared  
487 (vii) IMMEDIATE SOURCE: Same  
488 (x) PUBLICATION INFORMATION: None  
489 (xi) SEQUENCE DESCRIPTION: SEQ ID:NO:26  
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491 5'-CTGCGTTAGA CCGAGAACTG TGGATAAAGG-3' 30  
492

PAGE: 1

SEQUENCE VERIFICATION REPORT  
PATENT APPLICATION US/08/062,021DATE: 06/04/93  
TIME: 15:24:00  
S5726

LINE ERROR

ORIGINAL TEXT

24 Response Exceeds Line Limitations  
27 Response Exceeds Line Limitations  
30 Wrong application Serial Number  
32 Wrong Classification  
54 Wrong Sequence Number  
70 Wrong Sequence Number  
88 Wrong Sequence Number  
104 Wrong Sequence Number  
122 Wrong Sequence Number  
138 Wrong Sequence Number  
156 Wrong Sequence Number  
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190 Wrong Sequence Number  
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364 Wrong Nucleic Acid Designator (5)  
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364 Wrong Nucleic Acid Designator (3)  
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380 Wrong Sequence Number  
382 Wrong Nucleic Acid Designator (5)  
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382 Wrong Nucleic Acid Designator (-)  
382 Wrong Nucleic Acid Designator (-)

inch, 1.44 MB storage (IBM)  
3.3  
(A) APPLICATION NUMBER: To Be Assigned  
(C) CLASSIFICATION: To Be Assigned  
(xi) SEQUENCE DESCRIPTION: SEQ ID: NO:1  
(xi) SEQUENCE DESCRIPTION: SEQ ID: NO:2  
(xi) SEQUENCE DESCRIPTION: SEQ ID: NO:3  
(xi) SEQUENCE DESCRIPTION: SEQ ID: NO:4  
(xi) SEQUENCE DESCRIPTION: SEQ ID: NO:5  
(xi) SEQUENCE DESCRIPTION: SEQ ID: NO:6  
(xi) SEQUENCE DESCRIPTION: SEQ ID: NO:7  
(xi) SEQUENCE DESCRIPTION: SEQ ID: NO:8  
(xi) SEQUENCE DESCRIPTION: SEQ ID: NO:9  
(xi) SEQUENCE DESCRIPTION: SEQ ID: NO:10  
(xi) SEQUENCE DESCRIPTION: SEQ ID: NO:11  
(xi) SEQUENCE DESCRIPTION: SEQ ID: NO:12  
(xi) SEQUENCE DESCRIPTION: SEQ ID: NO:13  
(xi) SEQUENCE DESCRIPTION: SEQ ID: NO:14  
(xi) SEQUENCE DESCRIPTION: SEQ ID: NO:15  
(xi) SEQUENCE DESCRIPTION: SEQ ID: NO:16  
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5'-TGAGGTCGTG GAACCTTGATG GCGT-3' 24  
(xi) SEQUENCE DESCRIPTION: SEQ ID: NO:18  
5'-GGTCATCGCC GTAGTAGATG CGTAAGGCCT-3' 26  
5'-GGTCATCGCC GTAGTAGATG CGTAAGGCCT-3' 26  
5'-GGTCATCGCC GTAGTAGATG CGTAAGGCCT-3' 26  
5'-GGTCATCGCC GTAGTAGATG CGTAAGGCCT-3' 26  
5'-GGTCATCGCC GTAGTAGATG CGTAAGGCCT-3' 26  
5'-GGTCATCGCC GTAGTAGATG CGTAAGGCCT-3' 26  
(xi) SEQUENCE DESCRIPTION: SEQ ID: NO:19  
5'-GGAATGACGC AAGGACATAT GGGCGT-3' 26  
5'-GGAATGACGC AAGGACATAT GGGCGT-3' 26  
5'-GGAATGACGC AAGGACATAT GGGCGT-3' 26  
5'-GGAATGACGC AAGGACATAT GGGCGT-3' 26  
5'-GGAATGACGC AAGGACATAT GGGCGT-3' 26  
5'-GGAATGACGC AAGGACATAT GGGCGT-3' 26  
(xi) SEQUENCE DESCRIPTION: SEQ ID: NO:20  
5'-CCCAGGTGCA CACCAATGTG GTGGAT-3' 26  
5'-CCCAGGTGCA CACCAATGTG GTGGAT-3' 26  
5'-CCCAGGTGCA CACCAATGTG GTGGAT-3' 26  
5'-CCCAGGTGCA CACCAATGTG GTGGAT-3' 26

## LINE ERROR

## ORIGINAL TEXT

382	Wrong Nucleic Acid Designator (3)	5'-CCCAGGTGCA CACCAATGTG GTGGAT-3'	26
382	Wrong Nucleic Acid Designator (')	5'-CCCAGGTGCA CACCAATGTG GTGGAT-3'	26
399	Wrong Sequence Number	(xi)SEQUENCE DESCRIPTION: SEQ ID:NO:21	
401	Wrong Nucleic Acid Designator (5)	5'-GGACTGTGCG CGTTGTATAC CCTGC-3'	25
401	Wrong Nucleic Acid Designator (')	5'-GGACTGTGCG CGTTGTATAC CCTGC-3'	25
401	Wrong Nucleic Acid Designator (-)	5'-GGACTGTGCG CGTTGTATAC CCTGC-3'	25
401	Wrong Nucleic Acid Designator (-)	5'-GGACTGTGCG CGTTGTATAC CCTGC-3'	25
401	Wrong Nucleic Acid Designator (3)	5'-GGACTGTGCG CGTTGTATAC CCTGC-3'	25
401	Wrong Nucleic Acid Designator (')	5'-GGACTGTGCG CGTTGTATAC CCTGC-3'	25
416	Wrong Sequence Number	(xi)SEQUENCE DESCRIPTION: SEQ ID:NO:22	
418	Wrong Nucleic Acid Designator (5)	5'-ACTCCCGAAG CGAATGGCAC GTGGA-3'	25
418	Wrong Nucleic Acid Designator (')	5'-ACTCCCGAAG CGAATGGCAC GTGGA-3'	25
418	Wrong Nucleic Acid Designator (-)	5'-ACTCCCGAAG CGAATGGCAC GTGGA-3'	25
418	Wrong Nucleic Acid Designator (-)	5'-ACTCCCGAAG CGAATGGCAC GTGGA-3'	25
418	Wrong Nucleic Acid Designator (3)	5'-ACTCCCGAAG CGAATGGCAC GTGGA-3'	25
418	Wrong Nucleic Acid Designator (')	5'-ACTCCCGAAG CGAATGGCAC GTGGA-3'	25
435	Wrong Sequence Number	(xi)SEQUENCE DESCRIPTION: SEQ ID:NO:23	
437	Wrong Nucleic Acid Designator (5)	5'-CATAGCTTGT GCCCGTGTGG CACGT-3'	25
437	Wrong Nucleic Acid Designator (')	5'-CATAGCTTGT GCCCGTGTGG CACGT-3'	25
437	Wrong Nucleic Acid Designator (-)	5'-CATAGCTTGT GCCCGTGTGG CACGT-3'	25
437	Wrong Nucleic Acid Designator (-)	5'-CATAGCTTGT GCCCGTGTGG CACGT-3'	25
437	Wrong Nucleic Acid Designator (3)	5'-CATAGCTTGT GCCCGTGTGG CACGT-3'	25
437	Wrong Nucleic Acid Designator (')	5'-CATAGCTTGT GCCCGTGTGG CACGT-3'	25
452	Wrong Sequence Number	(xi)SEQUENCE DESCRIPTION: SEQ ID:NO:24	
454	Wrong Nucleic Acid Designator (5)	5'-CCAAGACGAG ACCGTCAGAG CTGGT-3'	25
454	Wrong Nucleic Acid Designator (')	5'-CCAAGACGAG ACCGTCAGAG CTGGT-3'	25
454	Wrong Nucleic Acid Designator (-)	5'-CCAAGACGAG ACCGTCAGAG CTGGT-3'	25
454	Wrong Nucleic Acid Designator (-)	5'-CCAAGACGAG ACCGTCAGAG CTGGT-3'	25
454	Wrong Nucleic Acid Designator (3)	5'-CCAAGACGAG ACCGTCAGAG CTGGT-3'	25
454	Wrong Nucleic Acid Designator (')	5'-CCAAGACGAG ACCGTCAGAG CTGGT-3'	25
472	Wrong Sequence Number	(xi)SEQUENCE DESCRIPTION: SEQ ID:NO:25	
474	Wrong Nucleic Acid Designator (5)	5'-AAGCTGTTGC CGCCATCAAA TAAACG-3'	26
474	Wrong Nucleic Acid Designator (')	5'-AAGCTGTTGC CGCCATCAAA TAAACG-3'	26
474	Wrong Nucleic Acid Designator (-)	5'-AAGCTGTTGC CGCCATCAAA TAAACG-3'	26
474	Wrong Nucleic Acid Designator (-)	5'-AAGCTGTTGC CGCCATCAAA TAAACG-3'	26
474	Wrong Nucleic Acid Designator (3)	5'-AAGCTGTTGC CGCCATCAAA TAAACG-3'	26
474	Wrong Nucleic Acid Designator (')	5'-AAGCTGTTGC CGCCATCAAA TAAACG-3'	26
489	Wrong Sequence Number	(xi)SEQUENCE DESCRIPTION: SEQ ID:NO:26	
491	Wrong Nucleic Acid Designator (5)	5'-CTGCGTTAGA CCGAGAAGTGT TGGATAAAGG-3'	
491	Wrong Nucleic Acid Designator (')	5'-CTGCGTTAGA CCGAGAAGTGT TGGATAAAGG-3'	
491	Wrong Nucleic Acid Designator (-)	5'-CTGCGTTAGA CCGAGAAGTGT TGGATAAAGG-3'	
491	Wrong Nucleic Acid Designator (-)	5'-CTGCGTTAGA CCGAGAAGTGT TGGATAAAGG-3'	
491	Wrong Nucleic Acid Designator (3)	5'-CTGCGTTAGA CCGAGAAGTGT TGGATAAAGG-3'	
491	Wrong Nucleic Acid Designator (')	5'-CTGCGTTAGA CCGAGAAGTGT TGGATAAAGG-3'	

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SEQUENCE MISSING ITEM REPORT  
PATENT APPLICATION US/08/062,021

DATE: 06/04/93  
TIME: 15:24:00  
S5726

MANDATORY IDENTIFIER THAT WAS NOT FOUND

APPLICATION NUMBER  
FILING DATE

## LINE ORIGINAL TEXT

## CORRECTED TEXT

3 (1)GENERAL INFORMATION  
8 (ii) TITLE OF THE INVENTION: DIAGNOSTIC  
33 (vii)PRIOR APPLICATION DATE: None  
42 (2)INFORMATION FOR SEQ ID:NO:1  
54 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:1  
58 (3)INFORMATION FOR SEQ ID:NO:2  
70 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:2  
76 (4)INFORMATION FOR SEQ ID:NO:3  
88 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:3  
92 (5)INFORMATION FOR SEQ ID:NO:4  
104 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:4  
110 (6)INFORMATION FOR SEQ ID:NO:5  
122 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:5  
126 (7)INFORMATION FOR SEQ ID:NO:6  
138 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:6  
144 (8)INFORMATION FOR SEQ ID:NO:7  
156 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:7  
160 (9)INFORMATION FOR SEQ ID:NO:8  
172 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:8  
178 (10)INFORMATION FOR SEQ ID:NO:9  
190 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:9  
194 (11)INFORMATION FOR SEQ ID:NO:10  
206 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:10  
212 (12)INFORMATION FOR SEQ ID:NO:11  
224 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:11  
228 (13)INFORMATION FOR SEQ ID:NO:12  
240 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:12  
246 (14)INFORMATION FOR SEQ ID:NO:13  
258 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:13  
262 (15)INFORMATION FOR SEQ ID:NO:14  
274 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:14  
280 (16)INFORMATION FOR SEQ ID:NO:15  
292 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:15  
296 (17)INFORMATION FOR SEQ ID:NO:16  
308 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:16  
314 (18)INFORMATION FOR SEQ ID:NO:17  
326 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:17  
330 (19)INFORMATION FOR SEQ ID:NO:18  
342 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:18  
348 (20)INFORMATION FOR SEQ ID:NO:19  
362 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:19  
366 (21)INFORMATION FOR SEQ ID:NO:20  
380 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:20  
386 (22)INFORMATION FOR SEQ ID:NO:21  
399 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:21  
403 (23)INFORMATION FOR SEQ ID:NO:22  
416 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:22  
422 (24)INFORMATION FOR SEQ ID:NO:23  
435 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:23  
439 (25)INFORMATION FOR SEQ ID:NO:24  
452 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:24  
458 (26)INFORMATION FOR SEQ ID:NO:25  
472 (xi)SEQUENCE DESCRIPTION: SEQ ID:NO:25

(1) GENERAL INFORMATION:  
(ii) TITLE OF INVENTION: DIAGNOSTIC  
(vii) PRIOR APPLICATION DATA: None  
(2) INFORMATION FOR SEQ ID NO:NO:1:  
(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:1:  
(2) INFORMATION FOR SEQ ID NO:NO:2:  
(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:2:  
(2) INFORMATION FOR SEQ ID NO:NO:3:  
(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:3:  
(2) INFORMATION FOR SEQ ID NO:NO:4:  
(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:4:  
(2) INFORMATION FOR SEQ ID NO:NO:5:  
(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:5:  
(2) INFORMATION FOR SEQ ID NO:NO:6:  
(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:6:  
(2) INFORMATION FOR SEQ ID NO:NO:7:  
(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:7:  
(2) INFORMATION FOR SEQ ID NO:NO:8:  
(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:8:  
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(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:9:  
(2) INFORMATION FOR SEQ ID NO:NO:10:  
(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:10:  
(2) INFORMATION FOR SEQ ID NO:NO:11:  
(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:11:  
(2) INFORMATION FOR SEQ ID NO:NO:12:  
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(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:13:  
(2) INFORMATION FOR SEQ ID NO:NO:14:  
(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:14:  
(2) INFORMATION FOR SEQ ID NO:NO:15:  
(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:15:  
(2) INFORMATION FOR SEQ ID NO:NO:16:  
(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:16:  
(2) INFORMATION FOR SEQ ID NO:NO:17:  
(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:17:  
(2) INFORMATION FOR SEQ ID NO:NO:18:  
(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:18:  
(2) INFORMATION FOR SEQ ID NO:NO:19:  
(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:19:  
(2) INFORMATION FOR SEQ ID NO:NO:20:  
(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:20:  
(2) INFORMATION FOR SEQ ID NO:NO:21:  
(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:21:  
(2) INFORMATION FOR SEQ ID NO:NO:22:  
(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:22:  
(2) INFORMATION FOR SEQ ID NO:NO:23:  
(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:23:  
(2) INFORMATION FOR SEQ ID NO:NO:24:  
(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:24:  
(2) INFORMATION FOR SEQ ID NO:NO:25:  
(xi) SEQUENCE DESCRIPTION: SEQ ID:NO:25

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SEQUENCE CORRECTION REPORT  
PATENT APPLICATION US/08/062,021

DATE: 06/04/93  
TIME: 15:24:00  
S5726

LINE ORIGINAL TEXT

CORRECTED TEXT

476 (27)INFORMATION FOR SEQ ID:NO:26  
489 (x1)SEQUENCE DESCRIPTION: SEQ ID:NO:26

(2) INFORMATION FOR SEQ ID NO:NO:26:  
(x1) SEQUENCE DESCRIPTION: SEQ ID:NO:26